CLAIMS

1. Catalyst comprising at least one zeolite (molecular sieve) chosen from the group formed by the TON structure type zeolites (Theta-1, ZSM-22, ISI-1, NU-10 and KZ-2) and at least one ZBM-30 zeolite synthesized with a particular structuring agent such as triethylenetetramine, at least one hydro-dehydrogenating element, and at least one porous mineral matrix.

2. Catalyst according to claim 1 in which the hydro-dehydrogenating element is chosen from the elements of Group VIB and Group VIII of the periodic table.

3. Catalyst according to claim 2 in which the hydro-dehydrogenating element of Group VIB is molybdenum and/or tungsten.

4. Catalyst according to one of claims 2 to 3 in which the hydro-dehydrogenating element of Group VIII is a noble metal of Group VIII.

5. Catalyst according to claim 4 in which the hydro-dehydrogenating element of Group VIII is platinum and/or palladium.

6. Catalyst according to one of the preceding claims subjected to sulphurization treatment.

7. Process for improving the pour point of a paraffin charge, in which the charge to be treated is brought into contact with a dewaxing catalyst comprising at least one zeolite (molecular sieve) chosen from the group formed by the TON structure type zeolites (Theta-1, ZSM-22, ISI-1, NU-10 and KZ-2) and at least one ZBM-30 zeolite synthesized with a particular structuring agent such as triethylenetetramine, at least one hydro-dehydrogenating element and at least one porous matrix.

8. Process according to claim 7 in which the treated charges contain at least 20% by volume of compounds boiling above 340°C.

9. Process according to one of claims 7 to 8 in which the operating conditions are the following:

- the reaction temperature is between 200 and 450°C,
- the pressure is between 0.1 and 25 MPa,
- the hourly volume rate (hvr expressed as volume of charge injected per volume unit of catalyst per hour) is between approximately 0.05 and approximately $30h^{-1}$.

10. Process according to one of claims 7 to 9 in which the charge undergoes a hydroisomerization-hydroconversion stage beforehand.

11. Process according to claim 10 in which all of the effluent from the hydroisomerization-conversion stage is sent to the dewaxing catalyst.

12. Process according to one of claims 10 to 11 in which the hydroisomerization-hydroconversion stage is preceded by a hydrorefining stage.

13. Process according to claim 12 in which the hydrorefining stage is followed by an intermediate separation.

14. Process according to one of claims 7 to 13 in which the effluent from the catalytic hydrodewaxing stage is at least partly sent to a hydrofinishing catalyst.